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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,358	10/28/2003	Masashi Kitazawa	032047	2558

38834 7590 03/30/2005

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EXAMINER

RAEVIS, ROBERT R

ART UNIT PAPER NUMBER

2856

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,358

Applicant(s)

KITAZAWA ET AL.

Examiner

Robert R. Raevis

Art Unit

2856

AM

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-22 is/are pending in the application.
- 4a) Of the above claim(s) 3-5 and 7-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1.6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, it is unclear exactly where the "inwardly bent" (line 3 from last) feature is geometrically located on the SPM cantilever structure. Specifically, the claim seems to suggest that the bend is on the two sides *at the* "terminal end portion" (line 3 from last), corresponding to portion 3 of Figure 2 (i.e. the middle portion of portion 2). However, the specification suggests that the "two sides 2a, 2b" (p. 13, line 2) "*are bent toward the inner side*" (italics added, p. 13, lines 3-4), and that ("*In other words*" (italics added, p. 13, line 4)) the portions having the *same* width as the lever portion 1 (corresponding to only the portion above portion 3 and below portion 1 in Figure 1) have a shape that suggests that portions unnecessary as the probe portion 2 are cut off (corresponding to non-existent probe portion material above portion 3 and below portion 1 in Figure 1), suggestive of the bend being at the upper portion of portion 2. Thus, it is unclear as to whether the bend refers to the bend at the lever-portion-1/probe-portion-2 interface (i.e. boundary 4, as suggested by the written specification), or at the probe-portion-2/terminal-portion-3 interface (as seemingly suggested by the actual words of the claim).

Presently, the drawings and specification (the single full sentence on p. 13, lines 4-7) suggest to the Undersigned that the bend is likely intended to be at boundary 4, and in that event, the bend may not be defined with regard to only the two sides of the

probe portion. Both the two sides of the probe portion and the two sides of the lever portion and would be necessary to define the angle (i.e. bend) therebetween.

No art rejection was applied against claim 1 in view of the 112(2) issue above.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Note was made of Figure 1B of Toda, but Figure 1B employs two points 104,105 and not "only" one as called for in Applicant's claim 1. Also, the boundary between the probe section 103 and cantilever 102 does not provide for joint-bent sides that create inward bending as seemingly described on p. 13. The boundary between portions 102 and 103 is visibly stepped along the sides, not bent. The embodiment of Figure 6C also employs dual points 1106,1107, and a boundary between portions 1103 and the cantilever that does not provide for a joint-bent sides.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raevis whose telephone number is 571-272-2204. The examiner can normally be reached on Monday to Friday from 5:30am to 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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